

# DONALD R. VAN DER VAART

MICHAEL SCOTT

### Solid Waste Section

May 13, 2016

Mr. Lynn Everett Everett's Clearing and Grading, Inc. 2402 Fred Everett Rd Kinston, NC 28504

Re: Comments on the Permit Application Everett's Land Clearing and Inert Debris (LCID) Pit Lenoir County, North Carolina Location No. P1303, Document ID No. (DIN) 25941

Dear Ms. Everett:

On March 30, 2016 the Division Waste Management (DWM), Solid Waste Section (SWS) received the permit application documents for the above-referenced new landfill facility which, on your behalf, are prepared by J. Branch Smith, PE Consultant Engineer. The documents are listed below:

- "LCID Maps" two copies.
- "Operations Plan LCID" one copy.
- "Site Narrative with Supporting Documents" one copy
- "Permit Application and Signature Page" one copy
- "Lenoir County Zoning Compliance Letter" one copy

To facilitate electronic filing of the above-mentioned documents to the DWM document tracking system, they are combined into a single document (permit application) with a DIN 25880.

Pursuant to the North Carolina Solid Waste Management Rules (Rule) 15A NCAC 13B .0563 through .0566 and Article 9 of the Chapter 130A of the North Carolina General Statutes (NCGS 130A-290, et seq.), the SWS has reviewed on the permit application and conducted a site visit on May 10, 2016. Based on the review and the observation at the proposed landfill site, the SWS has several comments on the application stated below. Your timely responses to the comments will expedite the completion of the reviewing processes.

### **Landfill Siting Criteria**

1. Please provide the approved applications and/or approval documents that demonstrate the proposed area is suitable for constructing and operating a LCID Landfill and meets the requirements stated in the Rules 15A NCAC 13B .0563(2), (3), (4), (5), (6) & (8). According to the "LCID Narrative" the facility has or had a mining permit issued by the NC Division of Energy, Mineral and Land Resources. If the permitted mining area

- owned by the Everett's Clearing and Grading, Inc. (ECANDG) including the proposed landfill property, and the above-referenced siting requirements for a LCIDLF were included in the mining application, please provide the SWS copies of the previously approved mining applications including drawings, approval letters, and/or permits.
- 2. The remarks in March 28, 2016 transmittal described that the mining facility has a valid and current Erosion and Sediment Control Plan approved by the NC Land Quality Section (NC LQS). Please provide a copy of the approved plan and approval letter.
- 3. Please conduct a subsurface investigation and conclude:
  - i. If the standing water in the mining pit is interconnecting to the nearby water body
    Falling Creek.
  - ii. A water well owned by North Lenoir Water Corporation is located approximately 150 feet from the proposed waste boundary of the LCIDLF-Phases 2 area. Please determine if the pumping operations from this water well will impact the landfill operation such as subsidence and if the waste operations at the proposed landfill will impact the water quality in this well.

### **Map**

- 4. (Drawing No. LCID-1) According to the info obtained from the Lenoir County Register of Deed, the acreage of the landfill property (Deed Book 987, Page, and Parcel # 4596) is 17.51 acres which is different from that (17.98 acres) on the Drawing No. LCID-1 and the one (13 acres) in the second paragraph of Section I. Site Description of LCID Narrative. Please clarify and provide a consistent data in the permit application.
- 5. (Drawing No. LCID-2) please add the rule-required info to the drawing:
  - i. Delineate the 100-feet buffer and set back lines according to Rule 15A NCAC 13B .0564(9)(b) [Rule 15A NCAC 13B .0565(3)(e)].
  - ii. Add all best management practices BMP(s) to the layout drawing in addition to the details on Drawing No. LCID-3.
- 6. Please provide a site plan (with topographical contours) drawing to show the proposed final cover system (also referring Comment No. 13).

# **Operations Plan LCID**

7. (Section 1 Waste Disposal Plan, items (c) & (d)) The land clearing and inert debris landfill (LCID Landfill), as defined in the Rule 15A NCAC 13B .0101(22), means a facility for the land disposal of land clearing waste, concrete, brick, concrete block, uncontaminated soil, gravel and rock, untreated and unpainted wood, and yard trash. The descriptions in the items (c) & (d) of this Section are not considered as the acceptable

waste stream for a LCID Landfill but the waste stream for a construction and demolition landfill. Please remove the items (c) & (d) from the Operations Plan [Rule 15A NCAC 13B .0566(2)].

- 8. (Section 1 Waste Disposal Plan, items (j)) Please provide additional information stated below:
  - i. Will this landfill facility open for the general public use for disposal of permitted waste streams? Please clarify.
  - ii. Will there the landfill operator on-site to conduct waste screening (in consistent with the item (m) of this Section) while the landfill is active for waste disposal activities? Please clarify.
- 9. (Section 1 Waste Disposal Plan, items (m)) Please address the following concerns:
  - i. Please describe the size (square footage) and physical structure of the berm including the base/pad to be used for collecting & temporarily storing unpermitted wastes. The location (s) of the storage unit(s) must be noted and shown on the drawing.
  - ii. Please provide the information (such as facility name, Solid Waste Permit Number, address, phone number, etc.) of the waste management facilities that will take the unacceptable wastes or recyclables for treatment, recycle, or final disposal.
- 10. (Section 1 Waste Disposal Plan, items (n)) Please add the following information to the item(n):
  - i. The Operations Plan shall implement that open burning of solid waste is prohibited at the landfill property [Rule 15A NCAC 13B .0566(12)].
  - ii. The local fire department or fire marshal must be informed that landfill operations and agree the fire-fighting assistance in a fire occurrence. The written agreement or a letter issued by the local fire department/fire marshal must be provided as the portion of the permit application document.
  - iii. All the on-site machinery must be equipped with functional fire extinguishers.
  - iv. Should a fire occur at the landfill, the fire reporting procedures in the Operations Plan must be followed. The SWS recommends the following procedures added to the Operations Plan.

Fires and explosions that occur at the landfill require verbal notice to the DWM within 24 hours and written notification within 15 days. Written notification must include the suspected cause of fire or explosion, the response taken to manage the incident, and the action(s) to be taken to prevent the future occurrence of fire or explosion.

The FIRE OCCURRENCE NOTIFICATION FORM can be downloaded from the DWM web site (link is provided below) and appended to the Operations Plan <a href="http://ncdenr.s3.amazonaws.com/s3fs-public/Waste%20Management/DWM/SW/Forms/FireOccurrenceReport.pdf">http://ncdenr.s3.amazonaws.com/s3fs-public/Waste%20Management/DWM/SW/Forms/FireOccurrenceReport.pdf</a>

- 11. (Section 1 Waste Disposal Plan, items (o)) Please provide the physical (911) address of the main office of Everett's Clearing and Grading, Inc. to assist the SWS representative (s) in conducting routine audit/inspection activities.
- 12. (Section 1 Waste Disposal Plan, items (p)) Please provide additional information regarding soil borrow and soil cover requirements.
  - i. According to the Drawing Nos. LCID-1 through LCID-3, the proposed landfill base, approximately 85 feet above mean sea level (amsl), will be constructed by backfilling earthen material, and there is no on-site soil borrow described or located in the permit application documents. Please provide the estimate volume of soil to be used for (a) constructing proposed landfill base (b) placing periodical/monthly soil cover throughout the landfill operations and (c) constructing the final cover system of the entire landfill (including proposed Phase 1 through Phase 3) [Rule 15A NCAC 13B .0564(7)]. The plan must also identify the sources of the required soil [Rule 15A NCAC 13B .0565(3)(k)].
  - ii. Pursuant to Rule 15A NCAC 13B .0566(4), adequate soil cover shall be applied over to cove the working face monthly or the active area reaches one (1) acre in size, whichever occurs first. Please add this requirement to the Operations Plan.
- 13. (Section 1 Waste Disposal Plan, items (q)) Please specifically state that the landfill closure, at a minimum, shall be according to Rule 15A NCAC 13B .0566(5).
- 14. (Section 2 Erosion and Sedimentation Control) This Section must describe the practices or operation procedures to meet and satisfy the minimum requirements in the following rules:
  - i. This Section must describe how to implement the erosion control and revegetation requirements according to Rules 15A NCAC 13B .0566(6) & (7), specifications stated in Drawing No. LCID-3, and approved Erosion and Sediment Control Plan.
  - ii. The last paragraph of the Section I. Site Description describes the surface drainage feature that "drainage runs into the pit and not offsite." Pursuant to Rule 15A NCAC 13B .0566(10) & (11), the physical structures or devices and operation practices described in the Operations Plan must ensure that solid waste shall not be disposed in water. Please specify the best management practices (BMPs) to prevent the disposed solid wastes in the standing water resulting in run-in/surface water flow.

- iii. According to the Drawing Nos. LCID-2 & LCID-3, the landfill will be developed by three phases. It is likely that ECANDG will construct and operate one phase at a time; so the remaining phases/open mining pits expect accumulate precipitation and run-in/surface flow. If this is the expected situation, please provide engineering device and construction practice to prevent water inside open mining pits and stormwater detention area seeping into the active landfill phase/cell.
- iv. According to the Drawing Nos. LCID-2 & LCID-3, the proposed final cover is flat without sloped surface. Should the final cap be designed with positive grading to facilitate surface drain toward the proposed stormwater area? If not, please provide the design, measure, or practice in the Operations Plan (including drawings and typical details) to show how to prevent water from ponding/standing on the top of the final cover system. (Please be advised that all landfills will be subject to waste settlement.)
- v. According to Rule 15A NCAC 13B .0101(24) any liquid in contact with the disposed solid wastes is defined as a leachate. Please describe the leach management and disposal approaches, or stormwater separation practices incorporating into the phased waste disposal plan accordance with Rule 15A NCAC 13B .0566(14).
- 15. The Operations Plan must describe the practices or operation procedures to meet and satisfy the minimum requirement in the Rule 15A NCAC 13B .0566(3).
- 16. (Section 3 Stormwater Management Plan) This Section proclaims that "there is no State-permitted stormwater management permit necessary for this site." Please provide a letter or written document issued by the NC Division of Water Resources to demonstrate the statement is true.
- 17. Permanent markers that accurately identify the edge of the approved waste disposal boundary must be installed and properly maintained. Please add this requirement to the Operations Plan.
- 18. The Operations Plan must describe the projected use of the land after the landfill is closed [Rule 15A NCAC 13B .0565(4)(b)].
- 19. The Operations Plan must provide description of systematic usage/phased development & operation of each proposed disposal area, operation, orderly development and closure of the landfill [Rule 15A NCAC 13B .0565(4)(c)].
- 20. Please provide the quantity of waste (gross capacity) will be disposed at each of three landfill phases. The data will be incorporated into the solid waste management permit for this landfill. A table to summary the info for each landfill phase will be acceptable:

Landfill Phase	Waste Footprint (acre) <sup>a</sup>	Gross Capacity (cubic yard) <sup>b</sup>
1		
2		
3		
Total		

#### Notes:

- a. Please refer the Comment Nos. 19, 21, & 24 for delineation of the waste footprint.
- b. The gross capacity is defined as the volume of the landfill calculated from the elevation of the initial waste placement (top surface of the landfill base approximately 85 feet amsl) through the top of the final cover, including any periodic cover [Rule 15A NCAC 13B .0565(4)(d)].

## **Site Narrative with Supporting Documents**

- 21. (Section 1 Site Description) According to the info obtained from the Lenoir County Register of Deed, the acreage of the landfill property (Deed Book 987, Page, and Parcel # 4596) is 17.51 acres, not 13 acres stated in this Section, nor 17.98 acres noted in Drawing No. LCID-1. Please clarify. Additionally, according to info present in Drawing No. LCID-2, the total waste boundary of the proposed landfill is approximately 9.6 acres (Phase 1 is 3.4 acres, Phase 2 is 1.3 acres, & Phase 3 is 4.9 acres). Please add this info to this Section.
- 22. In addition to the flood map included in the permit application, please provide conclusion if the landfill is located in the 100-year floodplain [Rule 15A NCAC 13B .0564(1)].
- 23. Please provide the copy of the property deed Deed Book 987, Page 0001. The deed info Deed Book 987, Page 0002 in the permit application is likely irrelevant to the project site.
- 24. According to Drawing Nos. LCID-2 & LCID-3, the proposed landfill disposal area/waste footprint Phases 1, 2 & 3 don't not meet the lateral buffer requirement 100 feet from the disposal area to property lines and commercial buildings [Rule 15A NCAC 13B .0564(9)(b)]. Therefore, the permit application shall provide the requested revision to the existing document or drawings and additional information:
  - i. Delineate and identify the waste boundary on the drawings according to the lateral buffer requirements stated in Rules 15A NCAC 13B .0564(9)(b) & .0565(3)(e) & (h).
  - ii. Use the new identify the waste boundary please redefine waste footprint (in acre) for each phase of the landfill Phases 1, 2, & 3.
  - iii. The proposed side slope for the landfill phases are greater than 3 (horizontal) to 1 (vertical) [Rule 15A NCAC 13B .0565(3)(j)]. Please revise the side slope to meet

- the rule requirement. Or provide geotechnical design and slope stability analysis to demonstrate that the proposed side slopes are stable during the active life of the landfill.
- iv. Provide two cross-sections, for each of the three proposed phases [Rule 15A NCAC 13B .0565(3)(o)].
- v. The proposed fill elevation of Phase 1 area shown on Drawing No. LCID-3 is inconsistent with that on Drawing No. LCID-2. Please clarify and make necessary correction.
- 25. Pleases address the following concerns of standing water in the proposed landfill unit/former mining area:
  - i. As described in the SHWT Report Evaluation, standing water was in the proposed landfill unit/former mining area. What is estimated amount of water to be removed at each landfill phase?
  - ii. Please provide the dewatering plan. If the water will be pumped to the nearby waterbody, the applicable discharge permit must be provided in the permit application. If the water is planning to drain to the proposed stormwater detention area/pond as shown Drawing No. LCID-2, please describe the dewatering processes, the capacity of the stormwater area and BMPs which shall be approved by NC LQS.
  - iii. Please describe construction sequences (such as removing of slough material, spreading and compacting suitable earthen material by layers, final grading for drain), BMPs for dewatering & pumping operation, and applicable specifications to properly construct/backfill the proposed landfill base for each of the three phases.

#### **Lenoir County Zoning Compliance Letter**

26. The attached zoning compliance letter is directly relating the mining permit, not applicable to construction and operation of a landfill. Please provide a copy of zoning letter issued by Lenoir County to demonstrate that the proposed landfill facility meets all requirements of any applicable zoning ordinance.

The SWS requires a hard copy of the written responses to each above-mentioned comment, and one copy of the revised permit application (one hard copy and one electronic copy in pdf format). Please contact me if you have any questions of the comments or the permitting processes.

Mr. Lynn Everett May 13, 2016 DIN 25941 Page 8 of 8

Sincerely,

Ming-Tai Chao, P.E. Environmental Engineer Division of Waste Management, NCDEQ

cc:

J. Branch Smith, P.E. Wes Hare, DWM

Ed Mussler, Permitting Branch Supervisor Central File